

SUPERCRITICAL WATER

The war against toxic waste could be won with a simple ingredient—water. Supercritical water, that is. Unbeknown to most, water can exist in a fourth state of matter apart from as a liquid, solid (ice) or gas (steam). It can be a supercritical fluid with some interesting properties, e.g., it will mix with oil, and it causes salts to settle out of solution. Even more amazing, the supercritical water can cause substances containing hydrogen and carbon to 'burn' without creating smoke or other lethal residues.

It was a French scientist, Baron Charles Cagniard de la Tour, who mixed the first batch of supercritical fluid in 1821 by heating water in a pressure cooker made from a sealed cannon barrel. He noticed that as the water reached a certain temperature, it stopped sloshing when he rocked the cannon. The water was too hot to stay liquid, and the pressure too high for the water to become a gas—thus it became 'supercritical'.

Today, the little-known properties of supercritical water are being rescarched by scientist Jurgen Steinle in his basement laboratory at the University of Karlsruhe in Germany. One of Steinle's experiments involves using a steel reaction vessel, really a commercial-style pressure cooker, fitted with a porthole-type lid, and positioned inside an explosion-proof test chamber as an extra precaution.

Jurgen Steinle has shown that supercritical properties emerge when the temperature inside the vessel is increased to 705° Fahrenheit, and the pressure reaches 3,200 pounds per square inch.

In Steinle's experiment, the reaction vessel is filled with a mix of 70 per cent water and 30 per cent methane, the main ingredient of natural gas. Next, commercial-grade oxygen is injected into the chamber through a line and valve. The result is a jet of smokeless blue flame which burns for a few seconds, then slowly shrinks and disappears. However, after cooling, analysis of a water sample reveals no trace of methane whatsoever. All that remains is pure water and carbon dioxide.

The ability of supercritical water to per-

DECEMBER 1994 - JANUARY 1995

form this sort of chemical reaction is so promising it has attracted the attention of the Pentagon. The US Department of Defense and Department of Energy have funded over a dozen projects with a view to commercialising the technology. Participants include General Atomics Corporation, San Diego, California; Eco Waste Technologies of Austin, Texas; and Modell Development Corporation, Framingham, Massachusetts.

Supercritical water technology has potential in the safe disposal of chemical weapons, e.g., nerve gas, in purifying waste water discharged from sewage plants, and in toxic waste destruction where conventional incineration methods leave residual toxins.

(Source: From James Wilson, <u>Outrider</u> <u>Report</u>, jimwils@aol.com(JimWils), 6 August 1994, via NEXUS OnLine!)

WHATEVER HAPPENED TO ...?

Several newspapers have referred to a new invention by one William Timmis, which, if successful, will revolutionise motive power.

The inventor is an unpretentious English mechanic residing in Pittsburg, PA, who claims to have invented a machine by

which untold motive power can be stored or used without the expenditure of fuel.

The story goes that he has been engaged for two years in perfecting the invention, and is now negotiating with the governments of England, Russia, and the United States for the sale of the right to use his discovery which, if after examination proves to be what he claims, will revolutionise the motive powers of the world.

He claims to be able to create a pressure of 20,000 pounds per square inch—more than sufficient to propel the largest ocean steamer afloat or to move eighty laden freight cars in one train.

The machine seems to be simply an air compressor of the simplest sort.

It consists of one small cylinder (six horsepower), with a balance weight of 75 pounds, which runs the entire apparatus; another small cylinder, five inches in diameter, with seven inches stroke, compresses the air into the tank from which the power is utilised.

Under the piston plate the inventor has placed two layers of bars containing eleven different minerals, the magnetic influence of which is the secret of the inventor.

The advantages he claims are durability, economy and simplicity. Experts have examined the machine and pronounce it a success.

In submitting his design to the governments named, Mr Timmis claims that the pneumatic generator can not only be applied to war vessels as a motor, but can be used as a defence against hostile attacks by means of air chambers placed behind the armour plating.

(Source: <u>Scientific American</u>, 4 August 1888, page 69; taken from KeelyNet BBS via NEXUS OnLine!)



NEXUS • 53

NEWSCIENCENEWSCIENCENEWSCIENCE

COMMENTS ON GRAVITY DROP TESTS PERFORMED BY DONALD A. KELLY

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onald A. Kelly, an independent researcher and consultant to the Space Energy Association in Clearwater, Florida, has been performing, from 1991 onward, an impressive series of tests that measure the behaviour of dropping weights in a magnetised or electrically energised state as opposed to their behaviour in a nonmagnetised (inert) state.

Various forms of magnetisation and electrical energisation have been used: permanent magnets arranged both horizontally and vertically on test plates, electromagnets, noninductive "Hooper-type" windings, as well as a combination of permanent magnets with bifilar, noninductive coils. The electric energisation was achieved by direct current (12 volt DC) as well as alternating current (12 volt DC) as well as alternating current (12 volt 60 hertz AC). Kelly described his results in various reports (see References).

Work on these experiments is currently continuing with a view to investigating differences of behaviour of dropping weights

not only between DC current and 60 hertz AC, but with various other frequencies and various wave-forms of AC.

The apparatus used is a rack with a mechanical release mechanism and two microswitches to activate a counter, as more closely described in Kelly's own reports.

The results have shown a significant lengthening of measured drop times in the magnetic and/or energised state as compared to the inert/non-energised state of the weights (plates).

The following is a summary of results described by Kelly. Note that drop times are measured in digital counter units, not in analogue time. The counter units can be converted to seconds using a conversion factor of .00463.

We see from these results that a significant and consistent lengthening of drop time has been recorded in all magnetic and/or energised test plates as compared with the inert/unenergised controls.

No weight difference in stationary plates. A check has been made to ascertain whether between the energised and unenergised modes of the test plates, there would be an observable weight change.

No such change of weight between unenergised and energised modes was observed,

Energising mode	Drop time inert	Drop time energised	Difference	Difference (per cent)
Permanent magnet flat mount	068	080	12	+ 17.6%
Permanent magnet vertical mount	084	122	38	+ 45.2%
Electromagnets DC energised	084	112	28	+ 33.3%
Noninductive winding DC energised	118	135	17	+ 14.4%
Perm. magnet core and noninductive winding DC energised	084	139	55	+ 65.5%
Noninductive winding AC energised	118	159	41	+ 34.7%
Electromagnets AC energised	084	150	66	+ 78.6%
Perm. magnet core and noninductive winding AC energised	084	153	69	+ 82.1%

measuring the weight of the plates, using an analogue scale, noting the weight with and without connection to DC voltage.

MOTION OR ACCELERATION?

The observed unequivocal lengthening of 'travel time' of the test plates suggests that some interaction is occurring between a moving magnetic and/or electrical field and a 'gravitational field' or a 'space background'.

The interaction is null as long as the test plates are stationary.

A question now arises: is the observed effect a consequence of motion or is it connected with acceleration?

The importance of this question might not be immediately obvious, so I shall try to explain.

If we are dealing with a resistance to acceleration, we are witnessing an increase of inertial mass of the test object, determined by an electric and/or magnetic phenomenon, but without a corresponding increase in gravitational mass. This would be a phenomenon that is present without regard to motion as such; it would not be measurable unless the object is subjected to acceleration, regardless of whether the acceleration is induced by Earth gravity or by some other means.

If, on the other hand, we are dealing with a resistance to motion, we have to ask ourselves: resistance to motion against what? A resistance to motion would infer resistance against 'changing of place' in relation to a (stationary) field or background. This could be a gravitational field or a background of space (ether) thought of as a kind of stationary grid system, stationary with regard to planet Earth in this case.

A third possibility would be to hypothesise that the motion of the energised or magnetised test plates in some way decreases the influence of gravity on the plates, actually leading to a change in weight (lightening) of the test plates only while in motion. This seems more unlikely, because a lighter test plate would not show such a large difference in drop time compared to a heavier but equally sized plate as that shown in the experiments.

CONCLUSION

Whatever the force involved will eventually turn out to be, Kelly has made a discovery that must stimulate us to rethink some of the basics of physics in order to explain what is the mechanism responsible for the 'abnormal' behaviour of magnetised and/or otherwise energised plates.

NEWSCIENCENEWSCIENCENEWSCIENCE

I hope that this pioneering research will help shake contemporary physics out of its complacent lethargic attitude and initiate a wave of fresh thought that will lead to some real progress in magnetic propulsion, anti-gravity and more generally in space power generation applications.

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THE CAR THAT RUNS ON HUMAN URINE

An engineering genius who worked for one of the giant auto-makers in Detroit says he's invented the answer to the energy crisis: a car that runs on human urine.

But Morris Wilhelm, 57, says the government and big business are trying to hush up his plans to produce cars fuelled by human waste.

"I get threatening letters and phone calls every day from the big oil companies and auto manufacturers," complains Morris.

"They're scared to death of my car because it means they won't make billions of dollars any more. But I want to help the United States. I don't want us to depend on any of those Middle East sheikhs or dictators for our energy. Now we can tell them all to go to hell!"

Morris began working on his "peemobile" auto, which he calls The Wilhelm, back in the late '70s when the energy crisis first hit America. He was fired from his high-salaried auto engineering job in 1983 by superiors who branded him a "lunatic" for his revolutionary ideas.

But he continued on his mission, com-

pleting the first urine-powered auto in January.

"It's really a very simple idea, based on the principles of nature," he says.

"It's the way the world works. The waste of one organism is the fuel of another. Growing grass feeds on steer manure. We breathe the oxygen that plants give off; they breathe the carbon dioxide we give off. Why is it so far-fetched that a machine could run on what the human body gives off?"

Morris' energy-saving engine feeds on the insoluble nitrogenous acid, salts, pigments and ammonia fumes in human urine.

"The beauty of this machine is its absolute efficiency," he boasts. "Most people stop at a service station to fill their tanks and relieve themselves. Now this can be done anywhere and in one single timesaving action."

Morris says he's looking for several brave, "environment-conscious" financial backers to help him mass-produce The Wilhelm.

(Source: Originally published in <u>The Sun</u>, 16 April 1991; downloaded via NEXUS OnLine!, via KeelyNet BBS, USA)

NEWSCIENCENEWSCIENCENEWSCIENCE

ENERGY FROM THE AETHER?

At the 1994 International Symposium on New Energy in Denver, we met some interesting people and collected some 'anecdotal' stories, including these.

There have been experiments involving the dropping of capacitors and finding that a voltage appears across the terminals. A dielectric appears to intercept and translate this flow into electrical energy. It could also simply be the collection of electrostatic energy from the air.

The reason I am bringing all this up is because of a diagram shown to me by my old friend, Vic Hansen. I was up very late one night and met Vic in the hall where we talked for a bit. He showed me a diagram of this very interesting idea that he says would allow one to pull energy from either the Earth or aether.

It required the use of a one-mile wire, laid out in a straight line. I asked him if it could be wound up and he says he does not think it will work if <u>not</u> stretched out.

So, you take this wire, support it from the ground by non-conducting 18-inch-high standoffs, and stretch it over the one-mile test area. On one end you put an AC power source with the ground wire connected to Earth ground and the high side connected to the wire. On the opposite end, you tie in a string of lamps. One side of the lamps is tied to the one-mile hot wire; the other side is tied to an Earth ground connection.

Vic says you stay at the AC power source side of the wire while watching the lamps with a pair of binoculars. When you switch in the AC power source, the lights will all light up.

Now comes the weird part. If you very rapidly transfer the one mile wire connection from the AC source directly to the Earth ground, the lights will stay on! Or so Vic tells us.

While taking an elevator down to the lobby, we ran into a fellow who was also building a type of free energy collection device. He says he will send us plans with further details but I'll tell you what he told us.

You make a box 30" wide by 15" tall by 15" wide. Layer it with spun-steel scour pads that are stretched out as a layer. On top of that layer you place a non-conductor. He said to use thin <u>styrofoam</u> sheets. You build multiple layers of this until the box is full. Two copper probes are then inserted into each side of the box, from the top down to the centre and running against the outside edges. This fellow's diagram shows one probe coming in from the upper left ending at the bottom centre of the box.

The other probe enters from the upper right and ends at the bottom centre of the box. Note that both probes stay up against the outside edges and do not touch. I think that allows for the flow of energy across the steel mesh.

A wet ground is then connected to the box probe on one side. The other probe is connected in series with a transformer (for removing the excess energy) that is again in series with a choke having 17 turns of wire and then passing into a dry Earth ground.

Our informant says this thing is supposed to produce around 5,000 volts at 10 amps. So, if you choose to try this, be very careful. It appears to work as a giant capacitor or Leyden jar. I have no idea if it works at all or, if so, how long it takes to 'charge'. The use of the transformer is peculiar because it indicates either a pulsing effect or AC itself.

Well, you've got the descriptions as told to us, so get after it and let us know what you find.

(Source: From Jerry Decker of KeelyNet BBS, PO Box 1031, Mesquite, TX 75149, USA, (214) 324 3501; downloaded via NEXUS OnLine!)